

07 JUL 2004

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
17 July 2003 (17.07.2003)

PCT

(10) International Publication Number  
WO 03/058155 A1

(51) International Patent Classification<sup>7</sup>: F42B 33/06

(21) International Application Number: PCT/GB03/00044

(22) International Filing Date: 8 January 2003 (08.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0200267.3 8 January 2002 (08.01.2002) GB

(71) Applicant and

(72) Inventor: ALFORD, Sidney, C. [GB/GB]; 41a Pickwick,  
Corsham, Wiltshire SN13 0HX (GB).

(74) Agent: FOX-MALE, Nicholas, H.; Eric Potter Clarkson,  
Park View House, 58 The Ropewalk, Nottingham NG1  
5DD (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

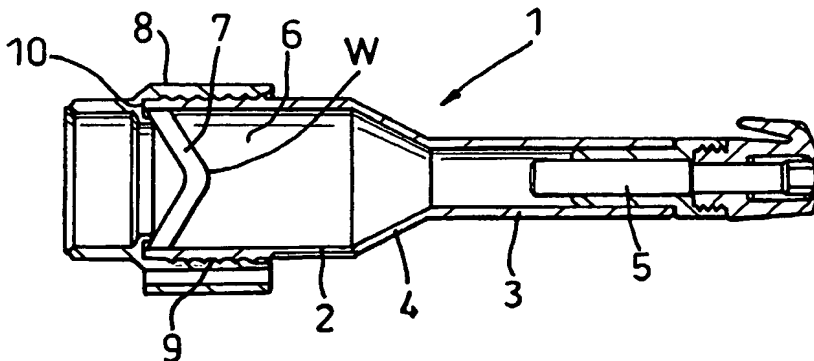
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,  
SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE FOR THE DISRUPTION OF EXPLOSIVE ORDNANCE

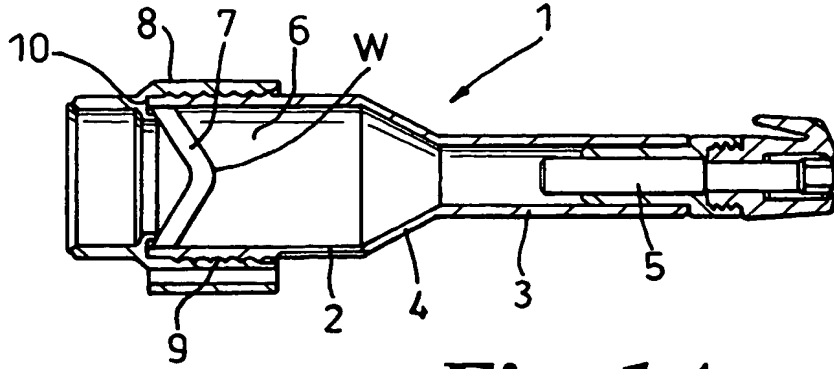


(57) Abstract: A plurality of embodiments of disruptor all have a container with an enclosure for explosive material with a wall which can be located in any one of a number of different positions using one or more tubular spacers (12) optionally of various sizes thereby to provide a wide range of capacity of enclosure and hence explosive material.

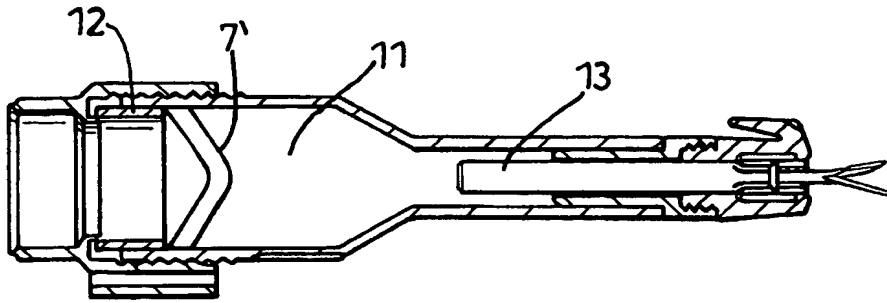


WO 03/058155 A1

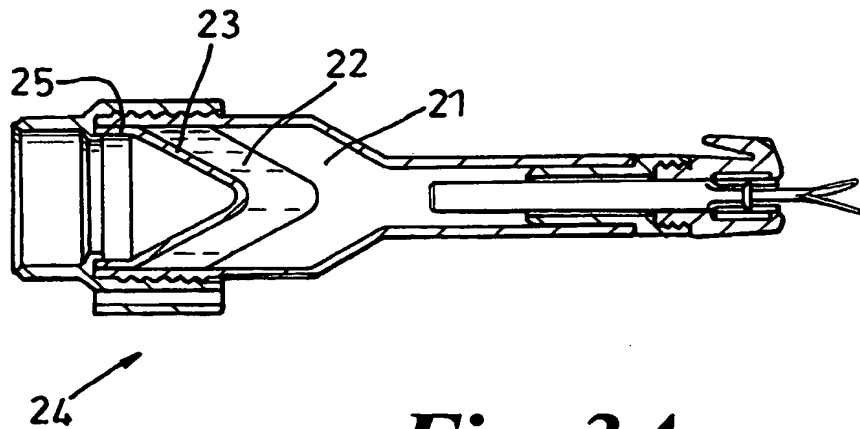
1/8



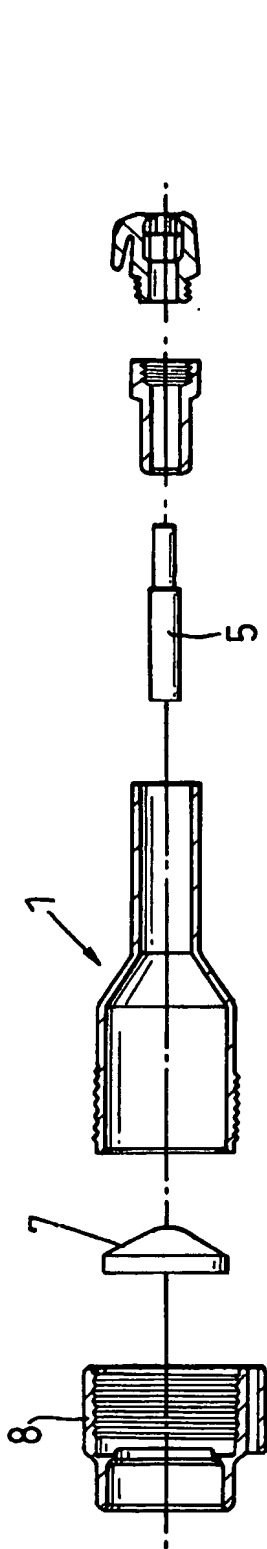
**Fig. 1A**



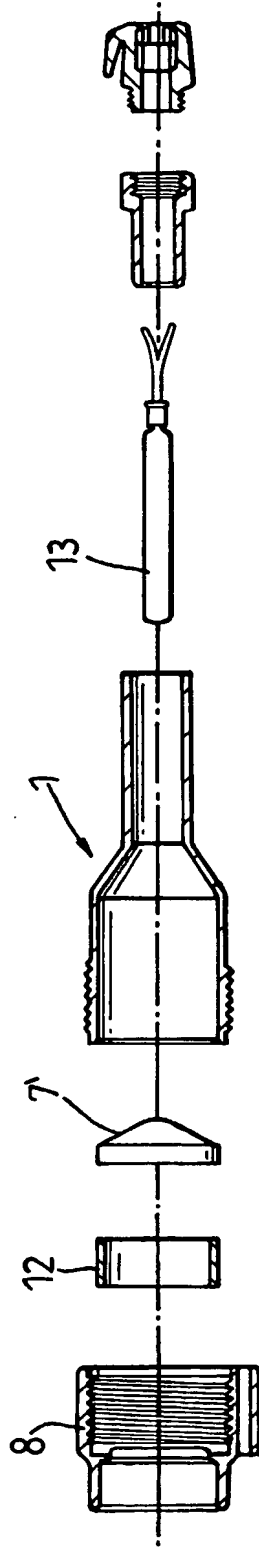
**Fig. 2A**



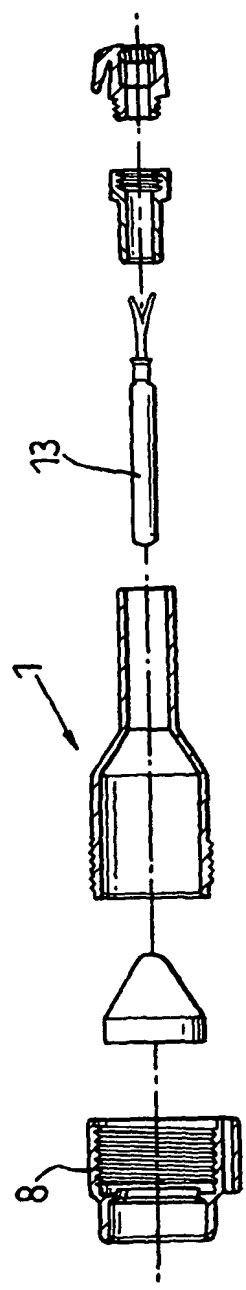
**Fig. 3A**



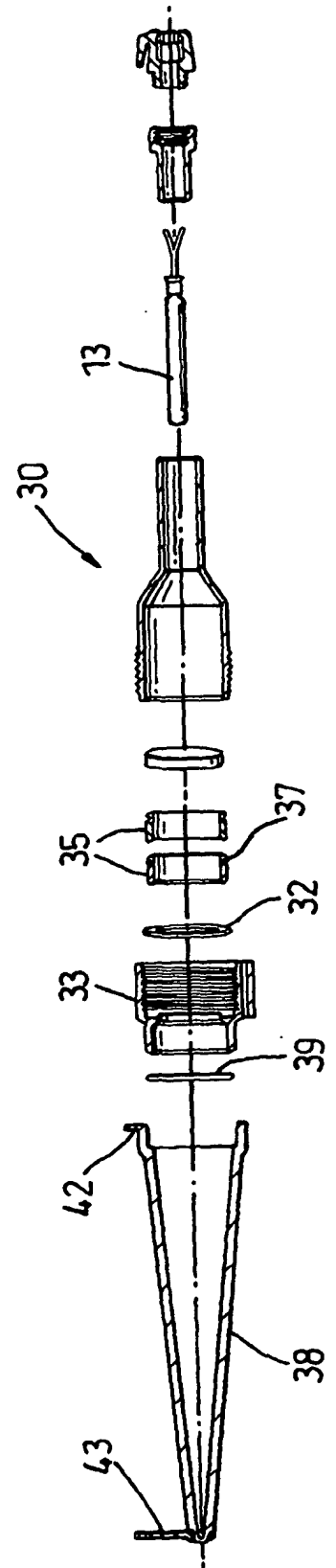
*Fig. 1B*



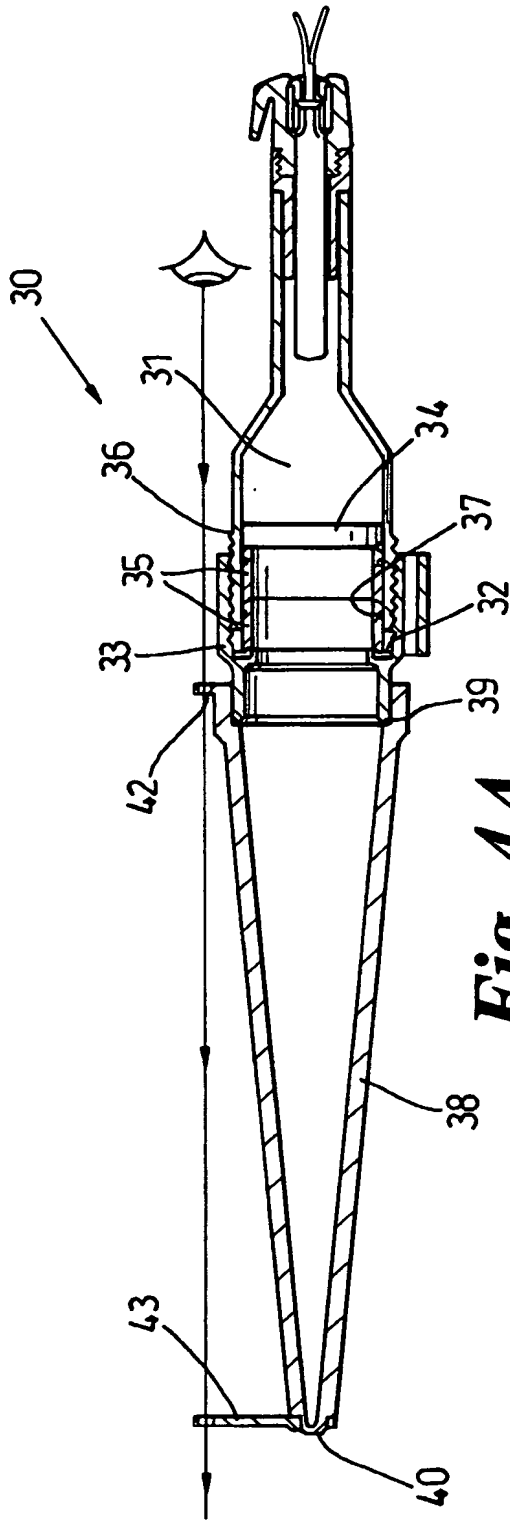
*Fig. 2B*



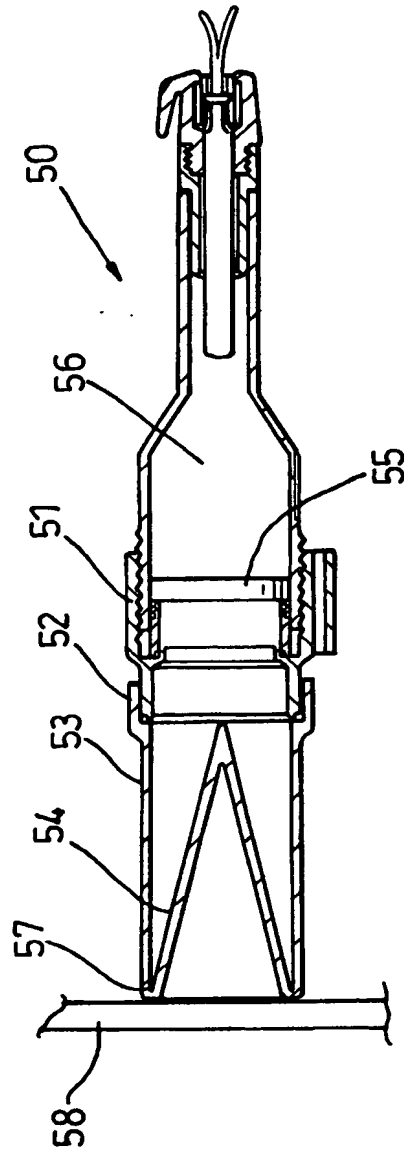
*Fig. 3B*



*Fig. 4B*

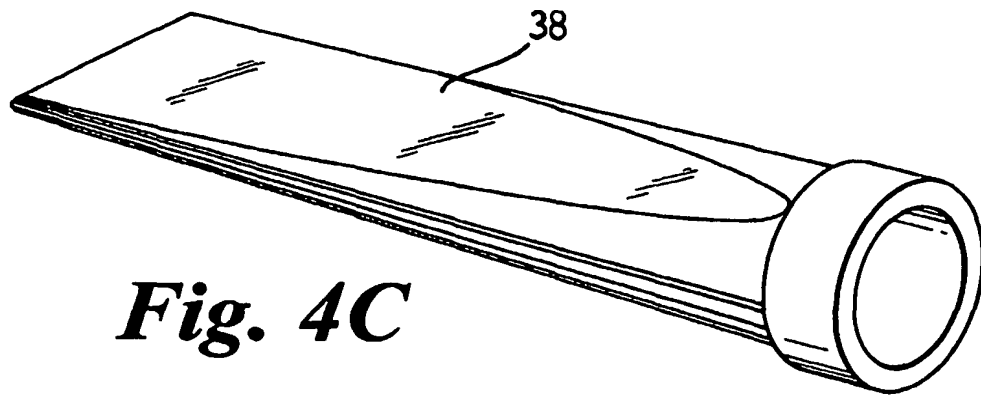


**Fig. 4A**

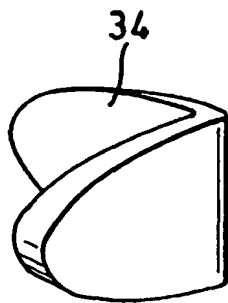


**Fig. 5**

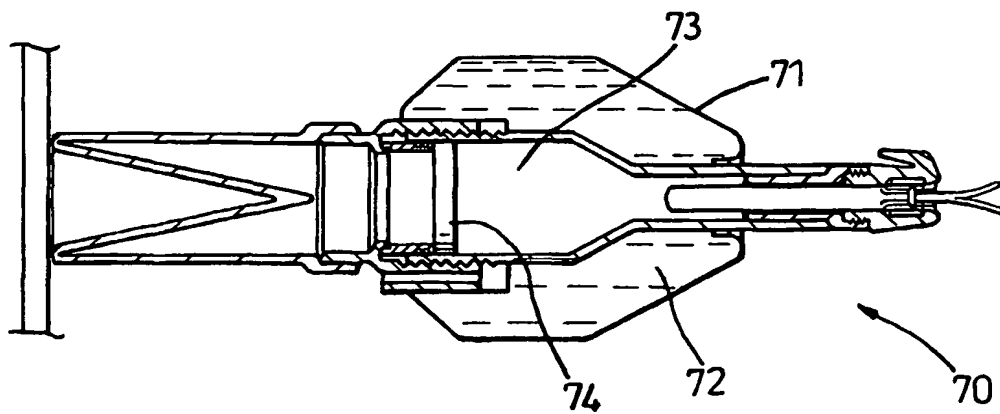
5/8



*Fig. 4C*

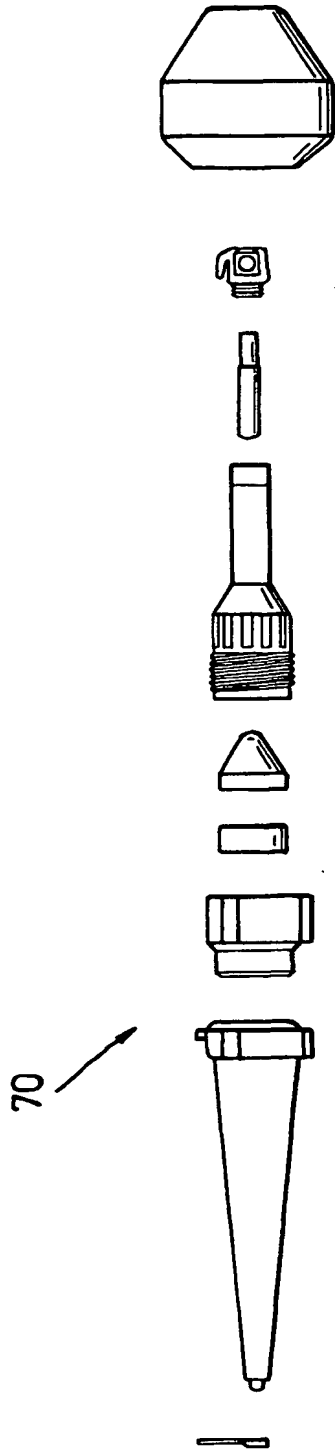


*Fig. 6*



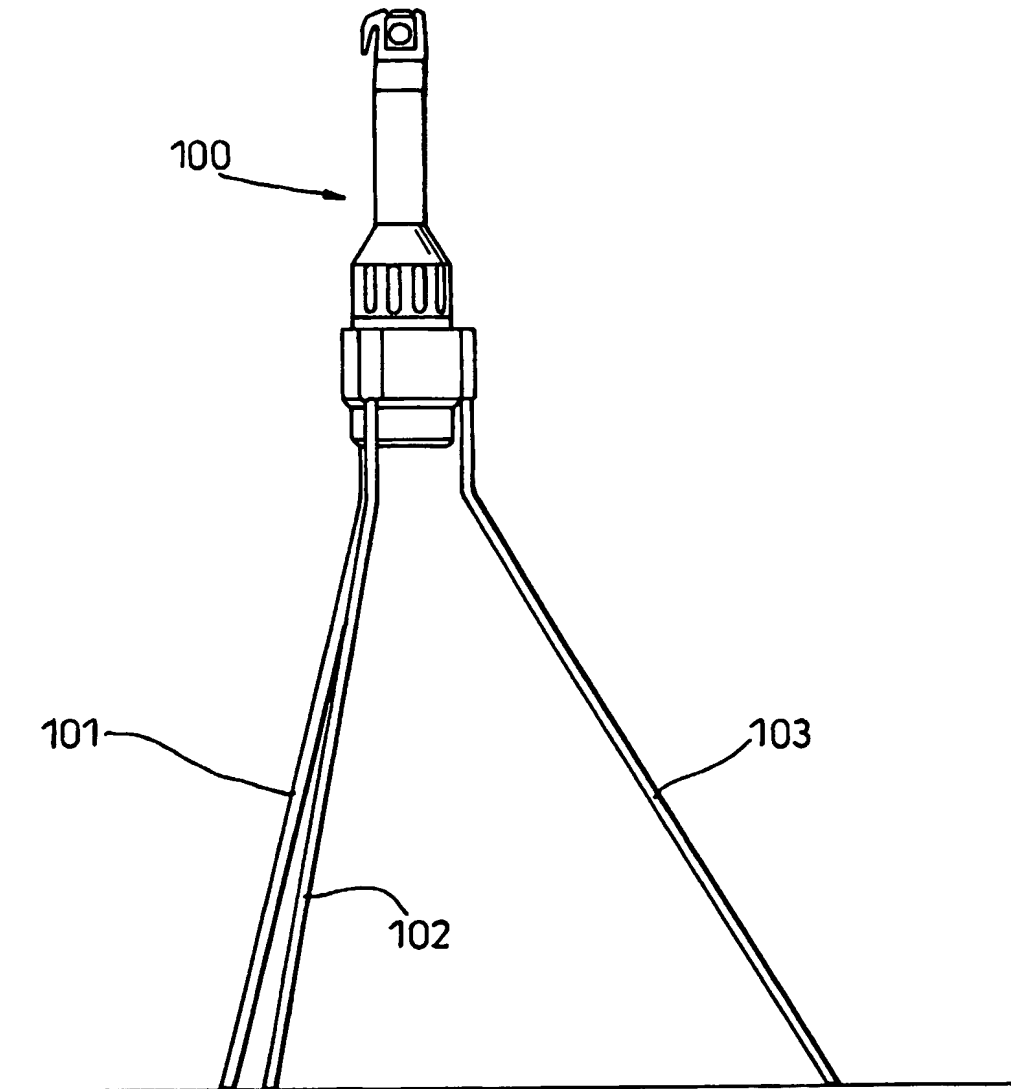
*Fig. 7*

6/8



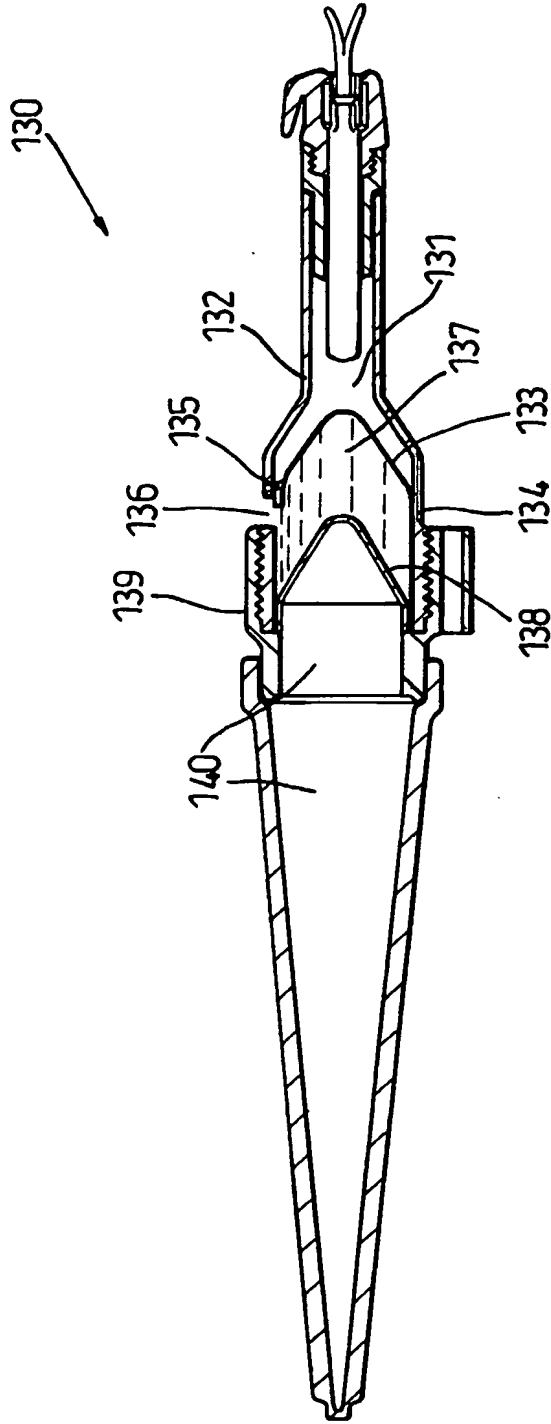
*Fig. 8*

7/8



**Fig. 9**





**Fig. 10**

## INTERNATIONAL SEARCH REPORT

Intern al Application No

PCT/GB 03/00044

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 F42B33/06

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F42B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 36 23 240 C (MESSERSCHMITT BOELKOW BLOHM) 15 October 1987 (1987-10-15) the whole document	14, 15
X A	US 5 936 184 A (BROWN RONALD L ET AL) 10 August 1999 (1999-08-10) column 3, line 51 -column 5, line 20; figure 4	12 1-11, 13-15
X A	DE 25 55 649 A (MESSERSCHMITT BOELKOW BLOHM) 16 June 1977 (1977-06-16) page 3, paragraph 2 -page 4, paragraph 3; figures 1-3	14 1-13, 15

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

7 May 2003

Date of mailing of the international search report

27/05/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Ziegler, H-J

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern	Application No
<b>PCT/GB 03/00044</b>	

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 3623240	C	15-10-1987	DE	3623240 C1	15-10-1987
US 5936184	A	10-08-1999	NONE		
DE 2555649	A	16-06-1977	DE	2555649 A1	16-06-1977